

June 2, 1998

Box Patent Application

Assistant Commissioner for Patents
Washington, Dc 20231

Presented for filing is a new continuation-in-part patent application of:

Applicant: JAY M. SHORT
Title: CONSTRUCTION AND USE OF CATALOGUED NUCLEIC ACID
LIBRARIES THAT CONTAIN ADVANTAGEOUSLY ADJUSTED
REPRESENTATIONS OF DEFINED COMPONENTS

Enclosed are the following papers, including all those required to receive a filing date
under 37 CFR §1.53(b):

	<u>Pages</u>
Specification	80
Claims	12
Abstract	1
Declaration(s) (PTO/SB/01)	2
Drawing(s)	2
Patent Transmittal (PTO/SB/05)	1
Small Entity Status-Independent Inventor (PTO/SB/09)	1
Small Entity Status-Small Business Concern (PTO/SB/10)	1
Assignment (PTO/SB/15)	1
Fee Transmittal (PTO/SB/117)	1

Enclosures:

- Permission to use sequence listing (2 pages)
- Postcard

This application is a continuation-in-part (and claims the benefit of priority under 35 USC §120) of U.S. application Serial No. 09/034,724, filed March 4, 1998. The disclosure of the prior application is considered part of (and is incorporated by reference in) the disclosure of this application.

I hereby certify under 37 CFR 1.10 that this correspondence is being deposited with the United States Postal Service as **Express Mail Post Office To Addressee** with sufficient postage on the date indicated below and is addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231.

Signature

Jay M. Short

Name

DATE OF DEPOSIT:

6/2/98

EXPRESS MAIL NO.:

EM EE090620022 US

This application is a continuation-in-part of U.S. Patent Application entitled "Production and Use of Normalized DNA Libraries", Serial No. 09/034,724, filed March 4, 1998; which is a continuation-in-part of U.S. Patent Application entitled "Production and Use of Normalized DNA Libraries", Serial No. 08/665,565, filed June 18, 1996.

This application is entitled to small entity status. Small entity status established in a previous application is still proper.

Basic filing fee	\$ 395.00
Independent claims in excess of 3 times \$41	1276
Total claims in excess of 20 times \$11	0
Multiple dependent claim fee	\$ 135.00
Total filing fee:	<u>\$ 1806.-</u>

A check for the filing fee is enclosed. A deposit account is being established, the reference number for which is expected to be available shortly and will be communicated immediately upon availability. Once this deposit account is established, any other required fees or any credits may be applied to this deposit account.

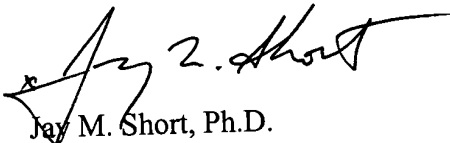
If this application is found to be INCOMPLETE, or if a telephone conference would otherwise be helpful, please call the undersigned at 619/453-7020 or 800/523-2990.

Kindly acknowledge receipt of this application by returning the enclosed postcard.

Please send all correspondence to:

Jay M. Short
Diversa Corporation
10665 Sorrento Valley Road
San Diego, CA 92121

Respectfully submitted,


Jay M. Short, Ph.D.

Enclosures

(Check # 10592)

800-523-2990

06/03/98
JC575 U.S. PTO

A/SEQ

Please type a plus sign (+) inside this box → ☒

PTO/SB/05 (4/98)
Approved for use through 09/30/2000. OMB 0651-0032
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 C.F.R. § 1.53(b))

Attorney Docket No.	
First Inventor or Application Identifier	Jay M. SHORT
Title	Construction and use of catalogued nucleic acid...
Express Mail Label No.	EM EE 090620022 US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

- ☒ * Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
- ☒ Specification [Total Pages **93**]
(preferred arrangement set forth below)
 - Descriptive title of the Invention **80**
 - Cross References to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to Microfiche Appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s) **12**
 - Abstract of the Disclosure
- ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets **2**]
- Oath or Declaration [Total Pages **2**]
 - ☒ Newly executed (original or copy)
 - ☐ Copy from a prior application (37 C.F.R. § 1.63(d))
(for continuation/divisional with Box 16 completed)
 - ☐ DELETION OF INVENTOR(S)
Signed statement attached deleting inventor(s) named in the prior application, see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).

- ADDRESS TO: Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231
- ☐ Microfiche Computer Program (Appendix)
 - Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
 - ☐ Computer Readable Copy
 - ☐ Paper Copy (identical to computer copy)
 - ☐ Statement verifying identity of above copies

- ### ACCOMPANYING APPLICATION PARTS
- ☒ Assignment Papers (cover sheet & document(s))
 - ☐ 37 C.F.R. § 3.73(b) Statement of Power of Attorney (when there is an assignee)
 - ☐ English Translation Document (if applicable)
 - ☐ Information Disclosure Statement (IDS)/PTO-1449
 - ☐ Preliminary Amendment
 - ☒ Return Receipt Postcard (MPEP 503) (Should be specifically itemized)
 - ☒ * Small Entity Statement(s) filed in prior application, Status still proper and desired (PTO/SB/09-12)
 - ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed)
 - Other: _____

* NOTE FOR ITEMS 1 & 13: IN ORDER TO BE ENTITLED TO PAY SMALL ENTITY FEES, A SMALL ENTITY STATEMENT IS REQUIRED (37 C.F.R. § 1.27), EXCEPT IF ONE FILED IN A PRIOR APPLICATION IS RELIED UPON (37 C.F.R. § 1.28).

16. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment:
☐ Continuation ☐ Divisional ☒ Continuation-in-part (CIP) of prior application No: **09,034,724**

Prior application information: Examiner _____ Group / Art Unit: _____
For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 4b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

17. CORRESPONDENCE ADDRESS

<input type="checkbox"/> Customer Number or Bar Code Label	(Insert Customer No. or Attach bar code label here)	or <input checked="" type="checkbox"/> Correspondence address below
Name	Jay M. SHORT Attn: Carolyn Erickson, IP	
Address	10665 Sorrento Valley Rd.	
City	San Diego	State CA Zip Code 92121
Country	USA	Telephone (800) 523-2990 Fax

Name (Print/Type)	Jay M. SHORT	Registration No. (Attorney/Agent)	
Signature	<i>Jay M. Short</i>	Date	5/29/98

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL

Patent fees are subject to annual revision on October 1.
These are the fees effective October 1, 1997.
Small Entity payments must be supported by a small entity statement,
otherwise large entity fees must be paid. See Forms PTO/SB/09-12.
See 37 C.F.R. §§ 1.27 and 1.28.

Complete if Known

Application Number _____
Filing Date 6/2/98
First Named Inventor Jay M. SHORT
Examiner Name _____
Group / Art Unit _____
Attorney Docket No. _____

TOTAL AMOUNT OF PAYMENT (\$)

METHOD OF PAYMENT (check one)

1. ☐ The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:

Deposit Account Number _____
Deposit Account Name _____

☐ Charge Any Additional Fee Required Under 37 C.F.R. §§ 1.16 and 1.17

☐ Charge the Issue Fee Set in 37 C.F.R. § 1.18 at the Mailing of the Notice of Allowance

2. ☒ Payment Enclosed:

☒ Check ☐ Money Order ☐ Other

FEE CALCULATION**1. BASIC FILING FEE**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
101 790	201 395	Utility filing fee	395
106 330	206 165	Design filing fee	
107 540	207 270	Plant filing fee	
108 790	208 395	Reissue filing fee	
114 150	214 75	Provisional filing fee	

SUBTOTAL (1) (\$) 395

2. EXTRA CLAIM FEES

Total Claims	Extra Claims	Fee from below	Fee Paid
136	20** = 116	11	1276
Independent Claims	- 3** =		0
Multiple Dependent			135

**or number previously paid, if greater; For Reissues, see below

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
103 22	203 11	Claims in excess of 20
102 82	202 41	Independent claims in excess of 3
104 270	204 135	Multiple dependent claim, if not paid
109 82	209 41	** Reissue independent claims over original patent
110 22	210 11	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$) 1806

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
105 130	205 65	Surcharge - late filing fee or oath	
127 50	227 25	Surcharge - late provisional filing fee or cover sheet.	
139 130	139 130	Non-English specification	
147 2,520	147 2,520	For filing a request for reexamination	
112 920*	112 920*	Requesting publication of SIR prior to Examiner action	
113 1,840*	113 1,840*	Requesting publication of SIR after Examiner action	
115 110	215 55	Extension for reply within first month	
116 400	216 200	Extension for reply within second month	
117 950	217 475	Extension for reply within third month	
118 1,510	218 755	Extension for reply within fourth month	
128 2,060	228 1,030	Extension for reply within fifth month	
119 310	219 155	Notice of Appeal	
120 310	220 155	Filing a brief in support of an appeal	
121 270	221 135	Request for oral hearing	
138 1,510	138 1,510	Petition to institute a public use proceeding.	
140 110	240 55	Petition to revive - unavoidable	
141 1,320	241 660	Petition to revive - unintentional	
142 1,320	242 660	Utility issue fee (or reissue)	
143 450	243 225	Design issue fee	
144 670	244 335	Plant issue fee	
122 130	122 130	Petitions to the Commissioner	
123 50	123 50	Petitions related to provisional applications	
126 240	126 240	Submission of Information Disclosure Stmt	
581 40	581 40	Recording each patent assignment per property (times number of properties)	
146 790	246 395	Filing a submission after final rejection (37 CFR 1.129(a))	
149 790	249 395	For each additional invention to be examined (37 CFR 1.129(b))	

Other fee (specify) _____

Other fee (specify) _____

SUBTOTAL (3) (\$) 1806

* Reduced by Basic Filing Fee Paid

SUBMITTED BY

Typed or Printed Name

Jay M. SHORT (Applicant)

Signature

x *Jay M. Short*

Date

x 5/29/98

Complete (if applicable)

Reg. Number

Deposit Account User ID

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Jay M. Short

Art Unit :

Serial No. :

Examiner :

Filed : 06/02/98

Title : CONSTRUCTION AND USE OF CATALOGUED NUCLEIC ACID
LIBRARIES THAT CONTAIN ADVANTAGEOUSLY ADJUSTED
REPRESENTATIONS OF DEFINED COMPONENTS

Assistant Commissioner for Patents
Washington, DC 20231

PERMISSION TO USE SEQUENCE LISTING

The above-identified patent application lacks a substitute paper copy of the Sequence Listing for inclusion into the Specification, as well as a computer readable form of the Sequence Listing. Applicants respectfully direct the attention of the Office to the following:

1. A complete paper copy of the Sequence Listing is included in the Specification at pages 70-76. This paper copy is identical to the paper copy of the Sequence Listing which is included in the Specification of U.S. Patent Application Serial No. 08/665,565; to wit, ("the '565 application").
2. A computer-readable form of the Sequence Listing identical to the paper copy of the Sequence Listing is on file in the '565 application. Pursuant to 37 CFR §1.821(e) I, reference to the computer-readable form on file in the '565 application patent is hereby made, which computer-readable form was filed in the '565 application on June 18, 1996. Said computer-readable form is identical to both the copy of the Sequence Listing on file in the '565 application and the paper copy of the Sequence Listing submitted in the present application, save that pertinent information (such as new address of Applicant) has been corrected. Applicants submit that the forgoing satisfies the requirements of Rule 1.821. If there are any questions regarding this response, the Office is invited to contact the undersigned.

BOOKS OF THE MONTH

Date:

5/2/98

~~Jay M. Short, Ph.D.~~

Signature _____

~~Jay M. Short~~

Name _____

6/02/98

EM EE090620022 US